

CLAIMS:

1. Oscillator circuitry comprising:  
a capacitor;  
capacitor charging means arranged to supply a current to charge the capacitor to a first predetermined threshold voltage;  
capacitor discharging means arranged to discharge the capacitor to a second predetermined threshold voltage; and  
switching means arranged to switch between a capacitor discharging mode and a capacitor charging mode responsive to reaching at least one of said threshold voltages, wherein the at least one threshold voltage is determined by a threshold setting means which provides a voltage threshold which varies to compensate for changes in temperature.
2. Circuitry as claimed in claim 1, wherein the threshold setting means comprises a current source and a resistive means which varies in resistance in dependence upon temperature.
3. Circuitry as claimed in claim 1, wherein the switching means comprises a comparator arranged to monitor voltage across the capacitor and to trigger a change between the discharging and charging modes.
4. Circuitry as claimed in claim 3, wherein the comparator is connected to a first control transistor which sets the first and second predetermined threshold voltages of the capacitor.
5. Circuitry as claimed in claim 4, wherein the first control transistor is arranged to selectively by-pass an element of a resistive chain.

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6. Circuitry as claimed in claim 3, wherein the comparator is connected to a second control transistor which controls current flow to facilitate charging and discharging of the capacitor means.

7. Circuitry as claimed in claim 2, wherein the resistive means comprises one or more diode-connected transistors.

8. Circuitry as claimed in claim 1, wherein the capacitor charging means comprises a current source.

9. Circuitry as claimed in claim 1, wherein the capacitor discharging means comprises a current source.

10. Oscillator circuitry comprising:

a capacitor;

a capacitor charger arranged to supply a current to charge the capacitor to a first predetermined threshold voltage;

a capacitor discharger arranged to discharge the capacitor to a second predetermined threshold voltage; and

a switch arranged to switch between a capacitor discharging mode and a capacitor charging mode responsive to reaching at least one of said threshold voltages, wherein the at least one threshold voltage is determined by a threshold setting circuitry which provides a voltage threshold which varies to compensate for changes in temperature.

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